Elevation of Loxaulus brunneus variety atrior (Kinsey) to full species status

(Hymenoptera: Cynipidae)

D. Charles Dailey

Sierra College, 5000 Rocklin Road, Rocklin, CA 95677

Loxaulus brunneus variety atrior (Kinsey, 1922) was originally described in the genus Compsodryoxenus Ashmead as a host restricted form on Quercus (Lepidobalanus) lobata Nee, from Byron, Contra Costa County, California. Weld did not believe Loxaulus brunneus (Ashmead, 1896), a species on Quercus (Protobalanus) chrysolepis Leibmann, would occur on Q. lobata; so he listed L. brunneus var. atrior as a separate entity in the Catalog of the Hymenoptera of North America North of Mexico (R. J. Lyon — personal communication). Of the 501 species names of cynipid gallmakers occuring on oaks listed in the catalog and both supplements (Weld, 1951, 1958, 1967), this is the only one listed as occurring on more than one subgenus of oaks. This deviation from such a distinct biological pattern suggested the separate identity of the two forms. The following indicates it is specifically distinct from L. brunneus (Ashmead) on Q. chrysolepis.

Comparison of the primary types showed variety *atrior* can be distinguished from *L. brunneus* (Ashmead) by the ventrally diverging inner -ocular margins; rounded occiput; head greater than 1.25 times as wide as high; anteriorly incomplete sculptured notaulicies, which are narrowly separated posteriorly; posteriorly curved rear margin of mesoscutum; weakly ridged, round to oval foveae; conspicuously branched medical propodeal carina; and ventral spine 1.5 to 2.0 times as long as high. *Loxaulus brunneus* has parallel inner-ocular margins; flattened occiput; head less than 1.25 times as wide as high; complete non-sculptured notaulicies, separated posteriorly by almost the width of one of the strongly ridged transverse foveae; slightly anteriorly curved rear margin of mesoscutum between notaulicies; numerous propodeal carinae; and ventral spine 2.0 to 2.5 times as long as high.

Gall biology — The original records relating to the identity of the gall of *L. brunneus* (Ashm.) are highly confused. No attempt to resolve this problem is presented, as these species can be readily distinguished by using only morphological differences.

Systematics — The original identification label of Kinsey's type specimen reads, "Comps. atrior HOLOTYPE." As with much of Kinsey's work, the imprecisely used term "variety" could have been listed as "host restricted ecological subspecies."

Type designation and deposition — The original description of *C. brunneus* var. *atrior* mentions the designation of "Holotype females" (plural). There are no records of more than one Holotype specimen other than in the original publication (M. Favereau —

personal communication). Assuming the listed designation was a typographical and proof reading error, the existing single specimen in the American Museum of Natural History labeled Holotype is accepted as the primary type, and the name *atrior* raised to full species status.

Loxaulus atrior (Kinsey), new combination

Distribution — Recorded from Byron, Contra Costa Co., Kinsey; Davis (12 specimens) and 5 mi. West of Madison, (6 specimens) Yolo Co., D. C. Dailey, Q. lobata; Marysville, Yuba Co., D. C. Dailey, Q. lobata, (2 specimens), Folsom Lake, Placer Co., D. C. Dailey, Q. lobata (1 specimen); Pentz, Butte Co., Calif. H. H. Kieffer, Quercus douglasii (new host record, if accurate) IV-16, 1928 (1 specimen). L. atrior probably occurs throughout the range of Quercus lobata Nee and possibly Quercus douglassii Hooker and Arnott.

Acknowledgments

Loan of the Holotype of *L. atrior* by M. Favereau of the American Museum of Natural History and *L. brunneus* by Dr. Paul D. Hurd, Jr., of the U.S. National Museum and use of Weld's notes and personal notes by Mr. Robert J. Lyon of the Los Angeles City College are greatly appreciated.

Literature Cited

Ashmead, W. H. 1896. Descriptions of New Cynipidous galls and gall wasps in the United States National Museum. Proc. U.S. Natl. Mus. 19:129.

Kinsey, A. G. 1922. New and described Cynipidae. Ind. Univ. Studies 53:39.

Weld, L. H. 1951. Cynipoidea, in Hymenoptera of North America North of Mexico, Muesebeck, Krombein, and Townes. U.S.D.A., pp. 594-654. 1958. Ibid. Supp. I. 1967. Ibid. Supp. II.

Editorial Notice

The editors are attempting to put the Pan-Pacific Entomologist back on schedule, however we are having some problems. The typeface we now use takes approximately 20% less space than the former style. This, coupled with several other factors, means we are in desperate need of manuscripts. We always have need for short notes of less than a full printed page, including book reviews of appropriate subjects.